WM Project 10, 11 16 MM 5/f (426.1/D1020) Docket No. WMGT r/f NMSS r/f (PDR) **≰** RBrowning JAN 24 1986 LPDR CB Distribution: MBell **JBuntin**a /D1020}JP/86/01/24 MKnapp 권Pohle & r/f (Return to WM, 623-SS) MFliegel PDR LPDR (B,N,S,) Dr. Roy E. Williams **EDavis** Williams and Associates. Inc. Enclosures in DCC Post Office Box 48

Dear Dr. Williams:

Viola, Idaho 83872

I have reviewed you Monthly Progress Report for December, dated January 7, 1986. This report describes the status of Williams and Associates Technical Assistance under Contract No. NRC-02-85-008. Progress made to date under this contract is satisfactory. Relative to ongoing work, I have the following comments.

Task 1 - NNWSI

Subtask 1.1

Complete

Subtask 1.2

Attached is a copy of a letter from Don Vieth (WMPO) to King Stablein (WMRP) which outlines recommended meetings for 1986. Although this letter may be revised based on an upcoming meeting between the Projects and DOE Headquarters, note that there are three meetings which could potentially involve us. First is a meeting related to the NNWSI Project Issue Hierarchy. While this is a priority of the Nevada Operations Office, it is still not clear if DOE Headquarters will be supportive of such a meeting. They may prefer to handle this on a generic basis. Nevertheless, you have a copy of the issues under review and we will be in a position to support such a meeting if it occurs. The NRC lead in this area is Seth Coplan's Performance Assesment Section. The level of our participation has not been defined as yet. Second is a meeting on Hydrology/Geochemistry. Because this is such a broad topic I want feedback from you on what our priority should be. For example, should the meeting be on the Unsaturated Zone, Saturated Zone or both? Should we limit the meeting to discussion of conceptual models and defer testing to another meeting or vice versa? Topics must be limited for the meeting to be of any use. Third is a meeting on Exploratory Shaft Testing. Clearly, this would be limited to the Unsaturated Zone but would not include any surface based testing such as the UZ holes or neutron holes. Before such a meeting we would require copies of the ES test plans for review.

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My opinion is that three Hydrology meetings prior to receipt of the SCP would be useful. In broad terms:

- 1. Unsaturated Zone: A discussion of their conceptualization followed by review of any surface based testing.
- 2. Exploratory Shaft: Review of Unsaturated Zone testing done in the ES.
- 3. Saturated Zone: A discussion of their conceptualization followed by review of any surface based testing.

Please return your ideas on priorities for meetings within two weeks of receipt of this letter.

Also attached for your information is a copy of the NNWSI Project Organization Charts. In addition, I have included a copy of the Draft Testing Schedule prepared by the USGS. This schedule is a broad background of site testing related to Geology, Geophysics, Tectonics and Volcanism, Stream Flow, Groundwater Analyses, Saturated Zone, Unsaturated Zone, Future Climates, etc. I think its very useful in getting an idea where the USGS is headed relative to site testing.

I have forwarded a complete set of previous document reviews to you under separate cover. Specifically, those reviews of documents done by the Hydrology team. I will forward a printout of my Bibliography List later this week. You should have a copy of every document on the list-please verify.

I notice that we do not have a formal review of USGS WRI 84-4345, "Conceptual Hydrologic Model of Flow in the Unsaturated Zone, Yucca Mountain, Nevada" by Montazer. While we reviewed this document during the review of the Draft EA I think we need a separate review done. Please have Dr. Osiensky and/or Dr. Bloomsburg start on this during the next month.

Subtask 1.3

No comment.

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Task 2 - BWIP

Subtask 2.1

Your letter report containing recommendations concerning the ISTP for BWIP, as required by Subtask 2.1, was received. This report included a list of BWIP related documents which you have in your possession. All requirements of Subtask 2.1 have been completed successfully.

Subtask 2.2

We have received your review of the BWIP document entitled, "Test Plan for Multiple-Well Hydraulic Testing of Seclected Hydrogeologic Units at the RRL-2 Site, Basalt Waste Isolation Project, Reference Repository Location" (SD-BWI-TP-040). In addition, we have received you trip report for the BWIP Hydrogeology meeting and pre-meeting held in Richland, Washington during December. Your follow-up letter containing detailed comments on this meeting was received and is being considered in preparing a meeting follow-up letter to DOE. I will have Mr. Weber send you a copy when complete. Mr. Weber informs me that he appreciated your team's support and dedication, which helped make the consultation with DOE successful.

I was interested to hear that your group has the same (or similar?) suite of programs available that were used by Mr. Marinelli to develop some calculations supporting comments on BWIP's Hydraulic testing program. In preparation for future meetings and document reviews you should consider developing analyses on a case-specific basis to support your comments. The advent of personal computers makes the cost of such calculations minimal. We need to begin doing more in this area.

Subtask 2.3

No comments.

Task 3 - SRPO

Subtask 3.1

No comments.

			 			
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Subtask 3.2

We have received your Trip Report for the November SRPO Geology Workshop held in Columbus, Ohio. I have given a copy to Mr. Ross. In addition, we have received copies of your reviews of "Analytical Study of the Ogallala Aquifier in Deaf Smith County, Texas" (TWDP Report No. 213) and "Interpretation of Pressure-Depth Data from Confined Underpressured Aquifiers Exemplified by the Deep-Basin Brine Aquifier, Palo Duro Basin, Texas" (WRR Vol. 21, No. 4).

Mr. Ross informs me that he has forwarded additional documents for your reference library. In addition, he will provide paper copies of any reports which are available to you only in micro-fiche form. Under separate cover he has provided a printout of those reports of which the SRPO team should have copies. He has further identified documents to be reviewed. He will be in contact setting out review priorities.

Subtask 3.3

No comments.

Task 4

Not initiated.

Task 5

We have received your letter report containing reviews of the two Draft Generic Technical Positions. Mr. Codell has been provided with copies and will consider your comments when finalizing the Draft positions. We appreciate your quick response to our review request.

Mr. Weber is reviewing your proposal related to preparing a letter report on determination of effective porosity from field data. He informs me that a response to your proposal will be ready sometime in February.

		 		
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The action taken by this letter is considered to be within the scope of the current contract NRC-02-85-008. No changes to cost or delivery of contracted services and products are authorized. Please notify me immediately if you believe that this letter would result in changes to cost or delivery of contracted products.

Sincerely,

Jeffrey A. Pohle, Project Officer Hydrology Section Geotechnical Branch Division of Waste Management

Enclosures:

cc:
Barry Bromberg, ACB
Richard Codell, WMGT
Neil Coleman, WMGT
Fred Ross, WMGT
Michael Weber, WMGT

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